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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/832,603
Filing Date: April 11, 2001
Appellant(s): COONEY ET AL.

Susan L. Lukasik
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed May 5, 2006 appealing from the Office action mailed July 15, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The statement of the status of claims contained in the brief is correct.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5546564	Horie	08-1996
5189606	Burns et al.	02-1993
5570291	Dudle et al.	10-1996
5063506	Brockwell et al.	11-1991
5062104	Lubarsky et al.	10-1991

(9) Ground of rejection

Claim Rejections - 35 USC§103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) **A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.**

4. Claims 1,8, 13,14, 15, 16, 17,18, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns et al. (U.S. PAT. 5063506A) and Horie (U.S.PAT. 5546564A).

Re claim 1: Burns et al. discloses using a computerized process that includes databases from which aspects of the cost are capable of being determined, provided lowest cost potential design, lowest cost potential manufacturing practices, lowest cost

potential supply chain management techniques, lowest cost potential labor rates, lowest cost potential uptimes and lowest cost potential yields are utilized, can be determined(Abstract, col. 3, lines 1-65, i.e. "the invention has been found to be three times more accurate than conventional architectural and engineering costing techniques" and gets "the most value for the dollar', thus, determining what the cost should be effectively revealing the lowest possible cost for the array of

parameters is taught by Burns et al. (col. 7, lines 60-67,col. 213, lines 55-67,col. 214, lines 60-67),

generating reports from said computerized process that include details of each aspect of the cost(col. 4, lines 5-25,col. 51, lines 40-55, col. 52, lines 1-10, col. 18, lines 65-67);

providing the reports to prospective suppliers of the component or service(col. 2, lines

25-35, i.e. reports provided to suppliers enable suppliers to submit

appropriate bids or cost figures for buyer review);

conducting discussions, with the prospective suppliers of the component or service, in an effort to gain concurrence on the fact basis of what the cost of the component, service or process ought to be(col. 16, lines 20-40, i.e. output data used to initiate

discussions, allows user to identify requirements and articulate

requirements, col. 45, line 59-col. 46, line 40);

conducting fact based discussions, with prospective suppliers of the component or service with whom concurrence on the cost has been reached, in an effort to reach an agreement on a price for the component, service or process based on the ought to be cost of the component, service

or process ought to be(col. 16, lines 20-40, i.e. output data used to initiate discussions, allows user to identify requirements and articulate requirements, col. 45, line 59-col. 46, line 40, i.e. contractor and supplier negotiations

are taught by Burns et al.

Burns et al. disclose(s) the claimed invention except determining, by the computerized process, a lowest potential cost for each of a plurality of aspects of the cost and totaling the lowest potential cost for each of a plurality of aspects, yielding the ought to be cost. However, in Abstract, col. 1, lines 50-60, col. 2, line 1-col. 3, line 30 thereof, Horie disclose(s) estimating the probability of a cost of an item or service based on various different factors compiled together and using the weighed average of that data. It would be obvious to one of ordinary skill in the art to modify the invention of Burns et al. based on the teachings of Horie. The motivation to combine these references is to ensure a more efficient and accurate method of calculating the potential cost of a service or item.

Re claim 8: Burns et al. disclose a method of using a computer to develop a factual report used in fact driven discussions with a supplier in an effort

to establish what the cost of a part or service ought to be, comprising the steps of:

identifying and quantifying the cost components of a part or step of a process that when totaled, determine what the cost of the part or process ought to be provided the lowest cost potential design, manufacturing practices, supply chain management techniques, labor rates, uptimes and yields(claim 1, col. 20, lines 20-40);

outputting from the computer program a report that specifies the cost of each part or process and how each component of this cost was established(col. 4, lines 5-25,col. 51, lines 40-55, col. 52, lines 1-10, col. 18, lines 65-67, Fig. 14f, item 482);

utilizing this report in cost driven discussions with a supplier to obtain an agreement with the supplier to provide parts or services at a price that is based on the ought-to-be

cost(col. 16, lines 20-40, i.e. output data used to initiate discussions, allows user to identify requirements and articulate requirements, col. 45, line 59-col. 46, line 40, i.e.

contractor and supplier negotiations are taught by Burns et al.

Burns et al. disclose(s) the claimed invention except inputting into the computer a plurality of possible costs for the cost components; making necessary calculations for each component of the part or step in the process; determining the lowest cost potential for each component of the part or step of the process; totaling the lowest cost potential for each of components and recording this as an ought-to-be cost. However, in Abstract, col. 1, lines 50-60, col. 2, line 1-col. 3, line 30 thereof, Horie disclose(s) estimating the probability of a cost of an item or service based on various different factors compiled together and using the weighed average of that data. It would be obvious to one of ordinary skill in the art to modify the invention of Burns et al. based on the teachings of Horie. The motivation to combine these references is to ensure a more efficient and accurate method of calculating the potential cost of a service or item.

Re claim 13: Burns et al. disclose a method comprising the steps of:

determining a design for a part(col. 5, lines 15-30);

Burns et al. disclose(s) the claimed invention except determining, by a computer, a lowest cost potential from a plurality of costs for at least two manufacturing factors for manufacturing the part, wherein the at least two manufacturing factors include at least two of: manufacturing practices to manufacture the part, supply chain management techniques to supply the part, labor rates to make the part, up time for equipment utilized to manufacture the part, yields of manufacturing the part, overhead, freight, and equipment utilized to manufacture the part; combining, by a computer, the lowest cost potential for the at least two manufacturing factors, yielding an ought-to-be cost for the part.

However, in Abstract, col. 1, lines 50-60, col. 2, line 1-col. 3, line 30 thereof, Horie disclose(s) estimating the probability of a cost of an item or service based on various different factors compiled together and using the weighed average of that data. It would be obvious to one of ordinary skill in the art to modify the invention of Burns et al. based on the teachings of Horie. The motivation to combine these references is to ensure a more efficient and accurate method of calculating the potential cost of a service or item.

Re claim 14: Burns et al. disclose the step of conducting discussions over the ought-to-be cost for the part with one or more prospective suppliers of the part in an effort to reach an agreement a price to pay a chosen supplier for the part(col.16, lines 20-40, i.e. output data used to initiate discussions, allows user to identify requirements and articulate requirements, col. 45, line 59-col. 46, line 40,i.e. contractor and supplier negotiations are taught by Burns et al.

Re claim 15: Burns et al. disclose method comprising the steps of: determining a first design for a part(col. 5, lines 15-30); determining a purchase price with at least one supplier while utilizing the ought-to be cost(col. 5, lines 55-67, col. 15, lines 25-50, col. 43, lines 10-35).

Burns et al. disclose(s) the claimed invention except determining, by a computer, a lowest cost potential for the first design for each of two or more of a plurality of manufacturing factors for manufacturing the part, wherein the plurality of manufacturing factors includes: labor rates, material costs,

overhead costs, capital costs, fabrication waste rates, uptime for equipment utilized to manufacture the part, and yields of manufacturing the part; generating, by the computer, an ought-to-be cost for the part from the lowest cost potential for the first design for each of the two or more manufacturing factors.

However, in Abstract, col. 1, lines 50-60, col. 2, line 1-col. 3, line 30 thereof, Horie disclose(s) estimating the probability of a cost of an item or service based on various different factors compiled together and using the weighed average of that data. It would be obvious to one of ordinary skill in the art to modify the invention of Burns et al. based on the teachings of Horie. The motivation to combine these references is to ensure a more efficient and accurate method of calculating the potential cost of a service or item.

Re claim 16: Burns et al. disclose further comprising the steps of modifying the
lowest cost potential for at least one of the plurality of manufacturing factors and
generating an updated ought-to-be cost for use in discussions with a supplier(col. 16,

lines 20-40, i.e. output data used to initiate discussions, allows user to identify
requirements and articulate requirements, col. 45, line 59-col. 46, line 40, i.e. contractor and supplier negotiations are taught by Burns et al.

Re claim 17: Burns et al. disclose further comprising the steps of determining a second design for the part(col. 18, line 45-col. 19, line 25);

Determining, by the computer, a lowest cost potential for the second design for each of at least two of the plurality of manufacturing factors(col. 3, lines 20-65, col. 5, lines 40-67, col. 6, lines 30-50, col. 18, lines 45-65);

Generating, by the computer, an ought-to-be cost for the part from the lowest cost potential for the first design for each of the two or more manufacturing factors and the lowest cost potential for the second design for each of the at least two manufacturing factors(col. 3, lines 20-65, col. 5, lines 40-67, col. 6, lines 30-50, col. 18, lines 45-65).

Re claim 18: Burns et al. disclose a method comprising the steps of:

totaling, by a computer, the lowest cost potential for each of the plurality of cost components of the part, resulting in an ought-to-be cost for the part (col. 3, lines 30-65, col. 4, lines 30-50, col. 7, lines 55-67);
engaging in cost-driven discussions with a supplier to obtain an agreement with the supplier to provide parts at a price that is based upon the ought-to-be cost(col. 16, lines 20-40, i.e. output data used to initiate discussions, allows user to identify requirements and articulate requirements, col. 45,

line 59-col. 46, line 40, i.e. contractor and supplier negotiations are taught by Burns et al.

Burns et al. disclose(s) the claimed invention except by a computer, identifying a plurality of cost components of a part and determining, from among a plurality of costs for the plurality of cost components, a lowest cost potential cost components of a part, wherein the cost components include costs related to at least one of material, labor, capital, machining, and overhead.

However, in Abstract, col. 1, lines 50-60, col. 2, line 1-col. 3, line 30 thereof, Horie disclose(s) estimating the probability of a cost of an item or service based on various different factors compiled together and using the weighed average of that data. It would be obvious to one of ordinary skill in the art to modify the invention of Burns et al. based on the teachings of Horie. The motivation to combine these references is to ensure a more efficient and accurate method of calculating the potential cost of a service or item.

Re claim 19: Burns et al. disclose wherein the cost components relate to at least one of a design for the part, manufacturing practices, supply chain

management techniques, labor rates, uptimes, and yields(col. 3, lines 30-65, col. 4, lines 30-50, col. 5, lines 15-30, col. 7, lines 55-67).

Re claim 20: Burns et al. disclose further comprising the steps of establishing a database that contains the lowest cost potential cost components a computer program

to obtain the ought-to-be cost for the part(Abstract, col. 7, lines 6067,col. 213, lines 55-67,col. 214, lines 60-67).

5. Claims 2-7, 9, 10, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns et al., Horie and Dudle et al.(U.S. PAT. 5570291A).

Re claims 2,5, 9 and 12: Burns et al. discloses in a computerized system, a method of determining what the cost of a part or service ought to be, the method comprising:

establishing one or more databases that store a plurality costs distributed among each of a plurality of cost components that are utilized for producing

parts and services, wherein the cost components include one or more of: design, manufacturing practices, supply chain management techniques, labor rates, uptimes and yields(Abstract, col. 2, lines 50-67,col. 3, lines 5-26, col. 7, lines 60-67,col. 213, lines 55-67,col. 214, lines 6067, the entire patent deals with knowledge bases and these are tables in the database with cost components);

providing database interface for the database (claim 1, 14, Fig. 14f, item 481); establishing a set of computer screens, including input fields into which cost components are capable of being inputted either directly or through menus that display options are capable of being selected, wherein the cost components are elements of

cost area such as material, labor, capital, manufacturing and overhead(Fig. 1,14f, item 481, claim 1);

for each cost area, totaling a lowest cost potential for each cost component, yielding a plurality of subtotals; totaling each of the plurality of subtotals, yielding a lowest potential cost that is the ought to be cost of the part or service(Fig. 14f, col. 4, lines 5-25, col. 6, lines 10-35).

Burns et al. disclose(s) the claimed invention except allowing remote access by one or more users and wherein the computer system is accessible from a network by authorized users of the network. However, in Abstract, col. 2, lines 4-25 thereof, Dudle et al. disclose(s) remotely communicating with computers from and to corporate offices and sales representatives offices. It would be obvious to one of ordinary skill in the art to modify the invention of Burns et al. based on the teachings of Dudle et al. The motivation to combine these Burns et al. and Dudle et al. references is remotely accessing computer databases and computer systems is well known as indicated in Dudle et al. and would make the Burns et al. system available to cost estimating personnel worldwide for more effective, consistent cost analysis.

Burns et al. and Dudle et al. disclose(s) the claimed invention except said computer program having the capability to determine a lowest cost potential for each of a plurality of cost components and to total each of the plurality of lowest cost potential cost components, yielding the ought to be cost of the part or service. However, in Abstract, col. 1, lines 50-60, col. 2, line 1-col. 3, line 30 thereof, Horie disclose(s) estimating the probability of a cost of an item or service based on various different factors compiled

together and using the weighed average of that data. It would be obvious to one of ordinary skill in the art to modify the invention of Burns et al. and Dudle et al. based on the teachings of Horie. The motivation to combine these Burns et al., Dudle et al. and Horie references is to ensure a more efficient and accurate method of calculating the potential cost of a service or item.

Re claims 3,4,6, 7, 10 and 11:

Burns et al. disclose printing out a report for a screen describing the components of the screen and the inputted amounts and the subtotal for the screen and printing out a report for all screen describing the components of each screen, the inputted amounts for each component, the subtotal for each screen and a total of all screens (col. 4, lines 5-25,col. 51, lines 40-55, col. 52, lines 1-10, col. 18, lines 65-67, Fig. 14f, item 482).

(10) Response to Arguments

Applicant's arguments filed May 5, 2006 have been fully considered but they are not persuasive. The applicant argues that Newman, Burns, Horie and Dudle do not teach or suggest any method that determines the lowest potential cost for a part. However, the word "potential" means possibly and Newman, Burns, Horie and Dudle do indicate various possible cost structures that incorporate lowest possible cost. Buyer Cost and Supplier Cost are related in that Buyer Cost is equal to the Supplier Cost plus a mark-up for profit. Burns teaches obtaining the best value for the dollar

and that is equal to the lowest cost(Abstract, col.24, line 10- col. 25, line 15) . Burns' example in Create Direct Cost is the most extensive section in CCMAS. Lowest_Subcost1 + Lowest_subcost2 = Lowest_total_cost.

This section is used to create the direct cost of construction without adjustments for contractor overhead and profit, escalation, or location specific costs for labor, materials, and equipment. The other sections of CCMAS make these adjustments. This section does include all of the work necessary to build the facility in the location specified in terms of insulation levels, seismic considerations, heating and cooling loads, rainfall, etc. CCMAS has three estimating processes. They were developed to handle different levels of detail known about a project and the time required to accomplish the analysis. These processes are the comparative, generic models, and quantity take off. The generic models are further broken out into Generic Systems Models for typical building systems out to the five foot line, generic supporting facility models for work outside the five foot line of the building, and generic runway/taxiway models. The processes are not independent, but, linked together to share information and validate the other processes. Following is a description of how these processes work.

(22) a. Comparative Process. This section (FIG. 3, comprising FIGS. 3a & 3b) requires the least amount of user input and time to execute. It uses historical information or information developed from the other process as a comparison to estimate a facility's cost. This process starts with costs at the facility level of the CCMAS Hierarchy and uses factors to break these costs down to the CCMAS-UNIFORMAT System, CCMAS-UNIFORMAT Subsystem, CCMAS Assembly, and CSI Division, then distributes the costs to the element level. The primary source of data used by this module is historical costs of actual executed projects. This historical cost is used to develop regression equations and cost adjustment factors. Additionally, the generic models and QTO processes described in the paragraphs below are used to develop additional cost adjustment factors for this process that are not readily available from historical cost information. Following is a description of how the knowledge bases are created for this process and how they are used.

bases are created for this process and how they are used.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Debra Charles

Conferees:

Charles Kyle

CHARLES R. KYLE
PRIMARY EXAMINER

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